

CLAIMS

1. A wireless base station which is connected to a plurality of wireless terminals and provides a multicasting service for the plurality of wireless terminals, characterized in that the wireless base station determines autonomously whether the wireless base station provides the multicasting service for the plurality of wireless terminals.

2. The wireless base station as claimed in claim 1, characterized in that the determination as to whether the wireless base station provides the multicasting service is made for each of a plurality of multicasting service groups.

3. The wireless base station as claimed in claim 1, characterized in that the determination as to whether the wireless base station provides the multicasting service is made based on a magnitude of a service area in which the wireless base station can provide the multicasting service for the plurality of wireless terminals.

4. The wireless base station as claimed in claim 1, characterized in that the determination as to whether the wireless base station provides the multicasting service is made based on whether the wireless base station has an overlapping service area.

5. The wireless base station as claimed in claim 1, characterized in that the determination as to whether the wireless base station provides the multicasting service is made based on a service state of a neighboring wireless base station.

6. The wireless base station as claimed in claim 5, characterized in that each of the wireless terminals which are

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connected to the neighboring wireless base station sends a state signal indicating the service state of the neighboring wireless base station.

5           7. The wireless base station as claimed in claim 1, characterized in that the determination as to whether the wireless base station provides the multicasting service is made based on a hop number of the wireless base station.

10           8. The wireless base station as claimed in claim 1, characterized in comprising:

          a transmitting means for transmitting a first state signal to a neighboring wireless base station, the first state signal indicating a multicasting service state of the wireless base station; and

15           a receiving means for receiving a second state signal from the neighboring wireless base station, the second state signal indicating a multicasting service state of the neighboring wireless base station.

20           9. The wireless base station as claimed in claim 1, characterized in comprising:

          a transmitter unit transmitting a first message;

          a receiver unit receiving a second message;

          a message processing unit extracting a multicast-related control data from the second message received by the receiver unit;

25           a determination unit determining whether the wireless base station provides the multicasting service, based on the extracted multicast-related control data; and

          a message generating unit generating the first message that is indicative of the result of the determination by the determination unit, and sending the first message to the transmitter unit so that the transmitter unit transmits the first message.

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10. A wireless base station which is connected to a control

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station and a plurality of wireless terminals and provides a multicasting service for the plurality of wireless terminals, characterized in comprising:

5 a transmitting means for transmitting a first state signal to the control station, the first state signal indicating a multicasting service state of the wireless base station; and

a receiving means for receiving a second state signal from the control station, the second state signal indicating a multicasting service state of a neighboring wireless base station.

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11. A wireless base station which is connected to a control station and a plurality of wireless terminals and provides a multicasting service for the plurality of wireless terminals, characterized in that the wireless base station determines whether  
15 the wireless base station provides the multicasting service, based on instructions received from the control station.

12. A method of selecting a wireless base station for a wireless terminal, the wireless base station providing a multicasting  
20 service for the wireless terminal, characterized in that, when the wireless terminal can receive same multicasting information from a plurality of wireless base stations, the wireless terminal selects one of the plurality of wireless base stations so as to make the number of the wireless base stations that send the same multicasting  
25 information as small as possible.

13. The method as claimed in claim 12, characterized in that, when there is a first wireless base station which is connectable to the wireless terminal and sending the same multicasting information  
30 to the wireless terminal, the wireless terminal selects the first wireless base station and is connected to the first wireless base station.

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14. The method as claimed in claim 12, characterized in that, when there are a plurality of first wireless base stations which are connectable to the wireless terminal and sending the same multicasting information to the wireless terminal, the wireless terminal selects one of the plurality of first wireless base stations such that the selected first wireless base station has a largest number of wireless terminals connected thereto, and the wireless terminal being connected to the selected first wireless base station.

15. The method as claimed in any of claims 12 to 14, characterized in that the selected wireless base station provides the multicasting service for the wireless terminal.

16. A wireless base station which provides a multicasting service for a wireless terminal, characterized in that, when the wireless terminal selects one of a plurality of wireless base stations so as to make the number of the wireless base stations that send identical multicasting information as small as possible, the wireless base station determines that the wireless base station provides a multicasting service for the wireless terminal.

17. A wireless base station which provides a multicasting service for a wireless terminal, characterized in comprising a counter in which a count value is incremented when a join message from the wireless terminal is received at the wireless base station, and decremented when a leave message from the wireless terminal is received at the wireless base station, wherein the wireless base station transmits the count value of the counter to the wireless terminal.

18. The wireless base station as claimed in claim 17, characterized in that the wireless base station transmits a renewed count value of the counter to the wireless terminal each time the

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count value is renewed.

19. The wireless base station as claimed in claim 17,  
characterized in that the wireless base station stops providing the  
5 multicasting service for the wireless terminal when the count value  
of the counter is equal to zero.

20. A wireless terminal which receives a multicasting service  
provided by a wireless base station, characterized in comprising:

10 an analysis unit determining the number of wireless terminals  
connected to a multicast group, based on a received control data; and  
a comparison unit determining whether the determined number  
is larger than the number of wireless terminals currently connected  
to the base station,

15 wherein the wireless terminal selects one of connection of the  
wireless terminal to the base station and disconnection of the  
wireless terminal from the base station based on the result of the  
determination of the comparison unit, so as to make the number of  
wireless base stations that send identical multicasting information as  
20 small as possible.

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